

Biographical Sketch

Wenbo Ma, Ph. D.

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Professional Preparation

Beijing Normal University, P. R. China	Biology	B. Sc., 1990-1994
Institute of Microbiology, Chinese Academy of Sciences, P. R. China	Microbial Genetics	M. Sc., 1994-1997
University of Waterloo, Canada	Biology	Ph. D., 1999-2003
University of Toronto, Canada	Plant-Microbe Interaction	Postdoctoral Fellow, 2003-2006

Appointments

Assistant Professor, 2006.10 – present

Department of Plant Pathology and Microbiology, University of California at Riverside

Research Areas

- Molecular mechanisms underlying plant – bacteria interactions.
- Virulence functions and co-evolution of bacteria type III effectors.
- Functional and comparative genomics of *Sinorhizobium fredii*.
- Identification of virulence factors from *Spiroplasma citri*.

Awards Received

- Natural Sciences and Engineering Research Council of Canada Postdoctoral Fellowship, October 2003 - September 2005
- W.B. Pearson Medal (for the best Ph.D thesis), University of Waterloo, May 2003
- E.B. Dumbroff Award in Plant Science, University of Waterloo, May 2003

- Winner of the Graduate Student Research Conference Award, Department of Biology, University of Waterloo, April 2002
- Ontario Graduate Scholarship, May 2001 - December 2002
- University of Waterloo Special International Graduate Scholarship, 2000

Publications

1. Lewis, J.D., Abada, W., **Ma, W.**, Guttman, D.S. and Desveaux, D. 2008. The HopZ family of *Pseudomonas syringae* type III effectors require myristoylation for virulence and avirulence functions in *Arabidopsis*. *J. Bacteriol.* In press
2. **Ma, W.** Dong F.F.T, Stavrinides J. and Guttman, D.S. 2006. Type III effector diversification via both pathoadaptation and horizontal transfer in response to a coevolutionary arms race. *PLoS Genetics*. 2(12): e209.DOI.
3. Stavrinides J.*, **Ma, W.*** and Guttman, D.S. 2006. Terminal reassortment drives the quantum evolution of type III effectors in bacterial pathogens. *PLoS Pathog.* 2(10): e104.DOI. (* co-first author)
4. **Ma, W.**, Charles, T.C. and Glick, B.R. 2004. Expression of an exogenous 1-aminocyclopropane-1-carboxylate deaminase gene in *Sinorhizobium meliloti* increases its ability to nodulate alfalfa. *Appl. Environ. Microbiol.* 70: 5891-5897.
5. **Ma, W.**, Guinel, F.C. and Glick, B.R. 2003. *Rhizobium leguminosarum* bv. *viciae* 1-aminocyclopropane-1-carboxylate deaminase promotes nodulation of pea plants. *Appl. Environ. Microbiol.* 69: 4396-4402.
6. **Ma, W.**, Sebestianova, S., Sebestian, J., Burd, G.I., Guinel, F.C. and Glick, B.R. 2003. Prevalence of 1-aminocyclopropane-1-carboxylate deaminase in *Rhizobia* spp.. *Antonie van Leeuwenhoek* 83: 285-291.
7. **Ma, W.**, Penrose, D.M. and Glick, B.R. 2002. The effect of ethylene on the nodulation of legumes. *Can. J. Microbiol.* 48: 947-954.
8. **Ma, W.**, Zalec, K. and Glick, B.R. 2001. Biological activity and colonization pattern of the bioluminescence labeled plant growth-promoting bacterium *Kluyvera ascorbata* SUD165/26. *FEMS Microbiol Ecol.* 35: 137-144.
9. Zhang, J., **Ma, W.** and Tan, H. 2002. Cloning, expression and characterization of a gene encoding nitroalkane-oxidizing enzyme from *Streptomyces ansochromogenes*. *Eur. J. Biochem.* 269: 6302-6307.
10. Glick, B.R., Penrose, D.M. and **Ma, W.** 2001. Bacterial promotion of plant growth. *Biotechnol. Adv.* 19: 135-138.
11. Tan, H., Yang, H., Tian Y, **Ma, W.**, and Liu, G. 1998. Structure and function of *sawI*— a gene related to differentiation of *Streptomyces ansochromogenes*. *Acta Microbiologica Sinica*, 38(6): 435-440.